



THE BIRDS OF THE BAHAMAS

100

SUPREME COURT OF THE UNITED STATES

THE AMERICAN SUGAR REFINING COMPANY,

Libellant and Appellant,

AGAINST

The Steamship *G. R. Booth*,

WILLIAM H. SAVILLE,

Claimant.

BRIEF IN SUPPORT OF THE PETITION OF LIBELLANT FOR A WRIT OF *CERTIORARI*.

This suit was brought in the District Court of the United States for the Southern District of New York, in admiralty, to recover \$10,000 damages to a shipment of sugar through the inflow of sea water by the bursting of the side of the ship from an explosion of cargo. The steamer *G. R. Booth* is a British vessel and carried the cargo in question from the port of Hamburg to Brooklyn, in the port of New York, where the accident occurred on the 14th of July, 1891.

Inasmuch as the actual damage was not the direct force of the explosion, but the melting of the sugar from the sea water entering through the bursted plates, the District Court held that the damage was a peril of the sea within the bill of lading. The Circuit Court of Appeals for the Second Circuit held that the case was such as to require the instruction by this Court whether this damage to the sugar was a peril of the sea or an accident of navigation.

It is respectfully submitted that this question is of sufficient importance to require the removal and the

examination of the entire record, and a decision of the whole matter in controversy, in the same manner as if brought here by appeal.

POINTS.

I.

It is important for the safety of life and property at sea that the question should be settled by this Court whether explosives like detonators may be carried in the ordinary hold of a steamship beneath the working and pressure of cargo, and transported and handled like ordinary merchandise.

In the statement of facts certified to this Court (fols. 765, 766) it is assumed and found by the Circuit Court of Appeals that such explosives may be carried and handled like ordinary merchandise without any special precautions. It is respectfully submitted that such a conclusion is incorrect, and should be reviewed by this Court.

The exploders, detonators or blasting caps contain each eight or nine grains (fol. 333) of fulminate of mercury, one of the most sensitive and dangerous explosives known. Although packed 100 in a tin box, five tin boxes in a blue paper box and 50 of these last, making 25,000 in all, in a wooden case about $2\frac{1}{2}$ feet square, they are still more or less dangerous from the well known tendency of the fulminate of mercury to escape from the caps, and thus explode. Such has been the decision of this Court.

Mather v. Rillston, 156 U. S., 391.

This is also in accordance with the investigation of these explosives made under parliamentary sanction in England, August 10th, 1887, by the official inspector of explosives, whose report was presented in the Courts below and was made a matter of reference by either party upon the argument (fols. 388, 389).

A portion of the report of Major Majendie, inspector of explosives, is annexed to this brief, as an appendix.

It is submitted that the question of proper safeguards for the carriage of explosive materials, of whatever description, on steamships at sea, should be gravely considered by the maritime courts. Any decision in approval of alleged customs which tend to diminish the care requisite for the handling of explosives, should have full consideration before affirmation by this Court. A grave issue involving the safety of life and property is necessarily involved in the decision of this cause.

II.

The evidence from the steamer does not warrant the conclusion of the Court below, that proper care was taken in the carriage of the detonators.

The substance of the whole case was :

1.—The masters and officers knew nothing of there being detonators on board.

Saville (fol. 210).

Williams (fol. 550).

Smiles (fol. 173).

Graham (fols. 163, 155).

2.—Had they known, when they came on board what the labels meant, they would have carried them on deck, or in some separate magazine, or in the square of the hatch.

“ In the hatchway,” White (fol. 62).

“ In the square of the hatch or on deck,” Saville (fols. 229, 254).

“ On deck or in the mouth of the hatchway,” Williams (fol. 571).

3.—The master and officers made no attempt to

find out what the word detonators meant on the manifest and bills of lading.

"I had just casually glanced through it"
[the manifest], Saville (fols. 260, 261).

"I would not have known the meaning of the marks," Williams (fol. 557).

4.—Hence no warning was given to the discharging stevedores.

Saville (fol. 231).
Williams (fol. 572).

5.—The foreman stevedore had a chance to see the copy of the manifest, but appears to have paid no attention to the detonators.

Fraser (fol. 405).
Townsend (fol. 469).

6.—The longshoremen who were handling the cases probably jarred them, causing the fulminate to escape, and unwittingly started the explosion.

Opinion of Court (fols. 743, 744).
Memorandum of Major Majendie, Inspector of Explosives, August 10, 1877. (See Appendix.)

7.—It is claimed that detonators had been carried in cargo holds of steamers before the *Booth*, but no single name of a steam vessel can be given.

Lau. On deck, but incased in a deck house (fol. 274), steamer *New York* (fol. 282).

On deck—so stated in bill of lading (fol. 275).

Very seldom on steamers—steamers decline to take them (fol. 273).

Chapman. Think coasting steamers carry them in certain place—a magazine (fol. 345).

Spence. Other steamers have brought detonators—couldn't give the name of any (fol. 378).

Fraser. "They generally stow them on the deck or right on top of the hatches, some of them are usually on top of the cargos underneath the hatches" (fols. 404, 405).

Townsend. Treated as general cargo (fols. 474, 475). Only case of a steamship bringing them before the *Booth* that he can particularize was the *Winchester* (fol. 508), where they were stowed *above* the main deck, in the saloon (fols. 508, 509).

Archer. On deck forward, sometimes aft under the turtle-back, or whale-back (fol. 526).

Witte. On deck, or in the square of the hatch (fol. 537).

8.—The acid on board the *G. R. Booth* (and the dynamite, if such was on board) was carried on deck.

Williams, fol. 555.

Fraser, fol. 441.

9.—This explosion, blowing open the steamer's plates below the water line, was the efficient cause of the loss.

A perusal of the report, printed as an appendix to this brief, and introduced by the claimant, is sufficient to show that the care necessary for the conveyance and safe handling of this shipment of detonators was not exercised.

III.

The ignorance of the ship's officers that detonators, or blasting caps, were in the hold was negligence.

The cases had the proper designation in German *Sprengkapseln*,* literally meaning "exploding caps," or "capsules."

*The German word *Spreng*, in composition, means an explosive, thus:

Spreng arbeit—blasting, splitting of rocks by powder.

Spreng-graben—mine.

They were properly described in the bill of lading and ship's manifest.

The master having already stopped the Hamburg stevedore from loading acids in the lower hold (fols. 555, 210) because he could recognize them by their appearance, should have employed some one who could read German to notice the labels on other cases.

Had he thus ascertained the meaning of the labels he would have stowed them where other cargo would not explode them. This the master and officers all admit would have been done (fols. 62, 229, 254, 571). It is negligence—amounting almost to criminal fault—for a general ship to load in the largest German commercial port with no one in charge acquainted with the language to heed the signs and descriptions of the goods taken on board.

It is their business as carriers to "appreciate" the character of the goods taken.

IV.

The question of law presented to this Court should be considered with all the facts in the case and not merely upon the point certified.

The English authorities relied on in the District Court have departed in a marked degree from the ancient law of carriers' liability, so often affirmed in this Court. The decision of the question of law raised would seem, therefore, to require something more than the mere answering of the distinct proposition submitted in the affirmative or the negative. The principles of law that are to be applied must be necessarily limited and distinguished by the special facts of this

Spreng-kiste—powder chest.

Spreng-kugel—bomb, shell, petard.

Spreng-pulver—blasting powder.

Sprengung—blowing up, explosion.

Zersprengen—to blow to pieces (usual verb for boiler explosion or military or naval explosion by torpedoes).

Thus, nitro-glycerine, in German, is called both *Sprengelatine* and *Sprengöl*.

cause. These can best be gained upon a review of the whole record.

The pleadings and testimony also raise the defense of the German law, as that of the port of shipment—a point of particular interest and importance in view of former decisions of this Court.

V.

It is manifestly for the convenience of the Court that the record should be certified in advance of the argument upon the certificate, so that the business of its docket may not be twice interrupted by consideration of the cause.

As stated in the petition, admiralty causes which deal with matters of fact are necessarily more unsatisfactory when reduced to the form of a single question of law, without all the qualifying facts. Having to settle a grave question of the liability of a common carrier by sea, and the validity and effect of an exemption under the terms of the contract, it is submitted that this Court will find that a consideration of the entire record will aid in reaching a right conclusion, and in establishing a precedent of great importance to the safety of life and property at sea.

HARRINGTON PUTNAM
Advocate for libellant.

APPENDIX.

Report to the Right Hon. the Secretary of State for the Home Department on the circumstances attending the destruction by explosion on the 30th June, 1877, of a floating magazine, moored on the River Thames below Gravesend, by Major V. D. Majendie R. A., H. M. Inspector of explosives.

Presented to both Houses of Parliament, by command of her Majesty.

(After statement of the Coroner's inquest, experiments, and nature of the detonators, the report considers the question whether any of the cases of detonators had been opened by the men who had been handling them, and then continues p. 7):

"I inquired closely as to the nature of the work on which the deceased were likely to have been engaged. It appears from Mr. Wood's evidence that his son (one of the deceased) had taken a note at the office that morning of an intended shipment of seven cases of Mr. Thorne's (Braun and Bloem's) detonators on board a coasting vessel for transmission to Cornwall (Rich and Son, Redruth). The vessel was expected down the river early in the following week, and as young Wood had some work to do on the Monday which would occupy him elsewhere, his father surmises that he had proceeded on board (accompanied by the two other deceased) for the purpose of putting out the seven cases in question (which were distinguished by particular numbers), and either hoisting them on to the deck to be stowed away in some part of the vessel where they would be ready to hand when called for, or depositing them in some convenient place under the hatch. Mr. Wood states that he knows of no other work upon which they could possibly have been engaged, they had no orders which would have entailed or authorized any unpacking or repacking of detonators, and he is decidedly of opinion that they were engaged on this business and no other.

"If this view be correct the enquiry becomes narrowed to a sufficiently fine point. How could an ex-

plosion of detonators be effected in the mere act of moving or hoisting closed cases of the same? I have already shown that so long as the detonators are in a normal condition the composition is exceedingly well protected against explosion. Indeed, in the course of the experiments which I have made I have found that a 1lb. weight be allowed to fall 27" on to a single unprotected detonator lying on its side without producing any greater effect than the distortion of the capsule and the detachment of some of the fulminate (see Appendix C). Dr. Dupré has obtained the same result a 2 lb. weight and a 30" fall, and only succeeded in obtaining an explosion under these conditions at the second or third fall. I have also frequently seen detonators which had been crushed and distorted by a blow without exploding. Clearly, therefore, a simple blow upon the detonator itself would be exceedingly unlikely to effect its explosion, unless, indeed, it were a blow of sufficient force to completely flatten the whole detonator and crush the fulminate violently between the flattened sides.

"I have also caused to be made a number of experiments (see Appendix C) to ascertain if the fall of a heavy case of detonators, packed as supplied, about 20 feet on to another similar case would produce an explosion. It is always difficult to prove a negative, and I am of opinion that my experiments and those which I am informed have been made by the manufacturers, are not sufficiently exhaustive to place the impossibility of producing an explosion in this way beyond all doubt, but so far I have failed, and so I understand have the manufacturers, to obtain an explosion under these conditions; while all experience (and the accumulated experience in regard to detonators is now very considerable) goes to prove that cases containing detonators packed in the usual way and under the usual conditions are capable of sustaining so considerable an amount of rough usages and knocking about as to relieve them from all suspicion of any special liability to accident in this way. Indeed, I believe that no instance whatever is on record of an explosion from this cause. It accordingly became my duty to ascertain experimentally whether, under *any* circumstances, an explosion of a case a packet of detonators could be produced by a fall. It had occurred to me that although detonators of proper construction, properly packed, might fairly be regarded as free from any such liability, the condition of things might be greatly altered if any of

the fulminate should chance to escape from a detonator. That such escape is possible, even under the most careful system of manufacturer, can hardly be doubted. Messrs. Eley Bros., who have an extensive experience in these matters, informed me that on proceeding to experiment with detonators, with a view to manufacturing them, they found that the composition, unless secured by varnish or tinfoil, was liable, when dry, to become detached either from shaking *in transport* or otherwise (letters of July 6th and 31st). This statement is quite consistent with what, from a personal experience of 10 years in the Royal Laboratory, I should have expected. I had also found in the course of my experiments that a blow upon the side of a detonator detaches the composition (see Appendix C). In some more recent experiments it appeared clearly that such detachment of the fulminate could be effected by the fall of one case containing detonators, packed as supplied, upon another similar case (see Appendix C). I was therefore entitled to assume the possibility of some fulminate becoming detached, and on this assumption I proceeded to inquire what, under such conditions, would be liable to occur. Messrs. Eley, in their letter to me of the 6th July (confirmed by the letter of 31st July), say they have found that, unless there was sawdust or sand for any detached fulminate to mix with, the grinding of the sharp edges of the detonators one against the other was sufficient to explode the lot. My own experiments on this point have been sufficiently conclusive, but before detailing them it is necessary to explain in what manner detonators are ordinarily packed.

"The detonators are generally supplied packed in one of two ways.

"Mr. Egestorff packs his in tin cylinders, the sides of which are lined with paper. Into each cylinder 100 detonators are placed, with these are mixed a quantity of sawdust. (In some of his recent issues, Mr. Egestorff has discontinued the sawdust, as liable to clog the detonators and cause misfires, and has placed a layer of cotton-wool inside the cylinder between the lid and the detonators). The cylinders are then packed in rolls of 5 in paper wrappers and laid in quantities of 10,000 or 12,000 inside a zinc box filled with loose paper. The zinc box is then placed inside a stout wooden box much larger than itself, the intervening space being filled with straw. The lid of the wooden box is then secured with brass screws and two wooden

bands nailed over all. Messrs. Braun and Bloem pack their detonators usually in tin boxes (100 in each), and sometimes in tin cylinders. There is no sawdust in the boxes (or cylinders), but cotton-wool is placed between the lid and the detonators. The tin boxes are not lined. The boxes (or cylinders) in fives are packed in paper, and these are laid inside a wooden case. It will be observed that in both systems, the detonators are inside a tin box or cylinder without any intervening lining or padding, except such as is afforded by the sawdust and paper in Egestorff's case, and by the wool at the top in Braun and Bloem's case; in both the copper detonators rest upon the bare tin at the bottom or other parts of the box (or cylinder). The question for solution was, whether if any fulminate became split inside such a box or cylinder, the box or cylinder would be free from risk of explosion by a fall. I had previously repeatedly dropped boxes and cylinders *without* any split fulminate 20 feet on to iron, and had thrown them violently against an iron platform without producing any explosion (see Appendix C). *But when I used boxes having a little split fulminate among the detonators, I succeeded in obtaining two explosions.* The boxes were those supplied by Messrs. Braun and Bloem, and contained their detonators packed as described, but with a little split fulminate purposely introduced, and the quantity being less than one-half the charge of a detonator. One of these boxes fell 20 feet on to iron once without explosion, but when the fall was repeated it exploded with great violence. A second box exploded at the first fall. I did not succeed in exploding any cylinders of Egestorff's detonators (with or without sawdust) by this means, but this result must not be taken as establishing that such cylinders could not be so exploded. It merely goes to show, if it shows anything, that this method of packing presents some advantages over that of detonators packed upright in a tin box, and it can hardly be doubted that where sawdust is present it renders the risk decidedly more remote; but the fact that two explosions were produced with Braun and Bloem's detonators, as described, is conclusive as to the fact that if fulminate should escape inside a metallic unlined package of detonators, an explosion of the same by a fall is not impossible; indeed, becomes, under certain considerations, highly probable. This result is very important, not only in its bearing on this accident, but on the question of the packing of detonators for the future.

Conclusions as to cause of accident. "As regards the cause of this accident I have no longer any doubt. I have by a process of elimination of all other conceivable risks arrived at the conclusion that the accident may be confidently stated to have originated with the detonators themselves. I have shown that all experience, including the experiments specially instituted by myself and others, points to the exceeding improbability, or almost impossibility, of exploding detonators in a normal condition and packed as they were packed on board this magazine, and I have also shown:

"1st. That the detachment or fulminate is no impossible or unlikely occurrence.

"2d. That where such detachment occurs a box of detonators may, with comparative readiness, be exploded by a fall. My experiments have also conclusively established, that if one detonator is exploded, all those in the box will explode also, and the explosion will extend to all other boxes which may be present (Appendix C).

"The conclusion appears, then, to be irresistible, that this unfortunate accident was due to the fall of a case, having inside of it a tin box (or cylinder) of detonators, from one of which a portion of the fulminate had, either through faulty manufacture, or *in transport*, become detached.

"It is in one sense satisfactory to be able to point out that if this explanation be excepted it relieves all persons concerned of special blame, and establishes the occurrence as a purely accidental one.

"In another scene, however, this conclusion is not so satisfactory, because it involves the admission that even with every care and precaution, detonators as at present packed are not so free from risk of explosion as they have generally been supposed to be. But this admission, hinging as it does upon the words "as at present packed," suggests a direction in which such improvements may be effected as will, if not entirely remove this risk, so attenuate it as to leave it not more formidable than that which must always attach more or less to the dealings with explosive materials of whatever description.

"It is obvious that in order to produce the result which has unfortunately given rise to this accident two conditions of things must arise. 1st. There must be detachment of fulminate. 2nd. The fulminate so detached must be exposed to those particular conditions under which its explosion would be impossible.

"As regards the first of these points, it appears to me that a remedy should be sought for in the direction indicated by Messrs. Eley; viz., in the adoption of some means by which any detachment of the fulminate would be rendered if not impossible, at least extremely improbable, while, as regards the second point, it is purely a question of packing. It is evident that so long as there is any possibility, however remote the probability may be, of fulminate escaping into an unlined metallic case, in which also are situated a number of metallic bodies (the copper capsules), a *liability* exists of accidental explosion, because in fact the fulminate is on a metallic anvil, exposed to a chance blow from, or friction against a small metallic body. No amount of padding or protection *outside* the box or cylinder in which this state of things exists can wholly remove, though it may sensibly diminish the liability to chance explosion."